

ABSTRACT

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Title of diploma thesis: Treatment of diabetes mellitus with a focus on insulin therapy

The Diploma thesis “*Treatment of diabetes mellitus with a focus on insulin therapy*” deals with the basic description of the disease, identifies the physiological effects of insulin and points to the facts that occur in organism in its absence. The central part of the thesis are chapters focused on insulin therapy, which has brought significant breakthroughs in treatment of diabetes (especially of the type 1) during the last eighty years. Based on the gathered information, the thesis provides an overview of currently available insulin-based preparations and accessories that increase the comfort and quality of life of patients suffering from this disease. And last but not the least, the work also reviews the new research directions and potential options in insulin therapy that are still at early phases of development. This is the reason why insulin therapy is of great interest in current pharmaceutical research.